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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,559	06/21/2001	Craig M. Conrad	A1085	7270

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EXAMINER

HYEON, HAE M

ART UNIT PAPER NUMBER

2839

DATE MAILED: 06/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s)

09/886,559

Applicant(s)

CONRAD ET AL.

Examiner

Hae Moon Hyeon

Art Unit

2839

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the colored regions being discontinuous in a length wise direction along the optical fiber must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 8 is objected to because of the following informalities: Claim 8 should be depended on claim 7 instead of claim 1 because claim 1 does not recite "the stripes." Only claim 7 introduces the limitation "stripes."
Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who

has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 7, 9-11, 14, 17, 19, 21, 22, 37 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Bonicel et al (5,379,363).

Bonicel discloses an optical fiber ribbon 10 comprising a plurality of parallel optical fibers 1 arranged in a generally planar array and bounded together by a covering 11. The optical ribbon 10 has an identifier 4, 14 visible at an outer surface of the covering 11. The identifier is comprised of at least two colored regions 14 of different colors. Figure 4 shows the colored regions are comprised of stripes extending transversely along the optical ribbon 10 and are repeated at periodic intervals along the optical ribbon. Bonicel teaches that the common outside covering is preferably transparent or semitransparent (see column 4, lines 3-14). Furthermore, Bonicel teaches that a plurality of the optical ribbon 10 can be used in an optical cable (see column 4, lines 15-22).

5. Claims 1, 14, 22, 29-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Hutton et al (6,381,390 B1).

Hutton discloses an optical ribbon 10 comprising a plurality of optical fibers 2 arranged parallel to one another in a planar array and arranged into at least two fiber sub-units 17 each

having at least one optical fiber 2. At least two fiber sub-units 17 are bound together by an outer matrix covering, which is comprised of separate regions of a first matrix material 15 adhered to each of the fiber sub-units 17 and a connecting region of a second matrix material 16 joining adjacent fiber sub-units together. The optical ribbon 10 includes identifying markings 11 visible at outer surfaces of the separate regions of the first matrix material 15. In column 5, lines 7-20, Hutton states that the common resin matrix material 16 (the connecting region) may be ruptured to provide access to the intact sub-units 17. Thus, it is inherent that the first matrix material has a higher modulus of elasticity than the second matrix material. Hutton also teaches that the separate regions of a first matrix material 15 may be color-coded and the connecting region of the second matrix material 16 may be transparent such that the color-code of the first matrix material 15 can be visible. Furthermore, Hutton teaches that optical ribbon 10 is formed by using a die 20 where optical fibers 2 are threaded through the die 20 to form covering 15, 16 and color-coding.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-6, 8, 12, 13, 15, 16, 18, 20 and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonicel et al in view of Mims, III and Hoffart et al (5,796,905).

While Bonicel discloses an optical ribbon having color-coding, Bonicel does not disclose a method of using color-coding described in the claims 2-6, 8, 12, 13, 15, 16, 18, 20 and 23-28. However, the method of color-coding described in these claims is same as the color-coding of resistor, which is well known. Regarding to the shape and arrangement of the color-coding, Hoffart discloses the color-coding made of longitudinally extending lines, dashes, and rings.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the color-coding method of the resistor and the shapes taught by Hoffart with the color coded optical ribbon of Bonicel in order to easily and clearly identify the optical ribbon.

8. Claims 1-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mims, III.

The instant invention is color-coding on a fiber optic ribbon. Figure 3 shows a color code for optical ribbon, which is basically a duplicate of resistor color-coding shown in the book by Mims. Regarding the number of colors used in coding and the shapes of coding are an obvious designer's choice since color coding using lines, dashes, dots, concentric circles, bands and the like are already known in the art. Regarding the method of making color-coded optical fiber ribbon, applying a covering and color over optical fiber by extrusion method is also known in the art.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to apply color-coding of resistor on an optical fiber ribbon in order to easily identify type of optical fiber ribbon.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 4,900,126 by Jackson et al., US Patent No. 5,377,292 by Bartling et al., US Patent No. 5,645,899 by Unterberger, and US Patent Application Publication No. 2001/0048797 A1 by Van Dijk et al.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae Moon Hyeon whose telephone number is 703-308-4802. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 703-308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

hnh

June 4, 2002


TULSIDAS PATEL
PRIMARY EXAMINER